AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF PAGES
	1	16

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0002	5/5/11		

6. ISSUED BY

Federal Aviation Administration
Acquisition Management Group, ANM-52
1601 Lind Ave SW
Renton WA 98057

7. ADMINISTRATED BY *(If other than Item 6)*

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

9A. AMENDMENT OF SOLICITATION NO.
DTFAWN-11-R-00111

9B. DATED *(SEE ITEM 11)*
5/2/11

10A. MODIFICATION OF CONTRACT/ORDER NO.

10B. AWARD DATED *(SEE ITEM 13)*

CODE | FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers **XX IS NOT extended.** Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation on as amended, by one of the following methods:

(a) By completing Item 8 and 15, and returning 1 copies of the amendment; (b) acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hours and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT/ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14,
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

The above referenced solicitation to **Design, Fabricate and Deliver Equipment Building, Provo, UT** is amended as follows:

1. The Scope of Work has been revised to delete brand name references. Remove and replace pages 4-15.
2. The due date for receipt of offers remains May 12, 2011.

Except as provided herein, all terms and conditions of the referenced document in Item 9A or 10A, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR _____ *(Signature of person authorized to sign)*	15C. DATE SIGNED	BY _____ *(Signature of Contracting Officer)*	16C. DATE SIGNED

SCOPE OF WORK

FABRICATION AND INSTALLLTION OF EQUIPMENT SHELTER
AT THE
PROVO AIR PORT
PROVO, UTAH

PART 1 GENERAL

The Federal Aviation Administration (FAA) shall add a new equipment building adjacent to the existing ATCT. This provides an enclosure for the racks associated with the establishment of a STARS remote ATCT at Provo. It will house the 3 electronic racks from the ATCT.
The ATCT is owned by the City of Provo and the new and the existing ATCT structures are located on Provo Air Terminal property, Utah.

1.1 STATEMENT OF WORK

Design the building foundation based on the government furnished Geotechnical evaluation and shelter manufacturer's recommendations that is attached with this scope document. Fabricate the equipment shelter and install mechanical and electrical equipment as detailed on the accompanying scope drawing. Coordinate delivery and installation of this government provided shelter. Coordinate resumption of primary electrical service.

THIS IS A DESIGN/BUILD PROJECT. THE ATTACHED DRAWINGS. ARE PROVIDED TO GIVE THE CONTRACTOR, A CONCEPTUAL IDEA OF THE TYPE OF EQUIPMENT SHELTER REQUIRED. THE CONTRACTOR IS ENCOURAGED TO PROVIDE A NEW AND UNIQUE PROPOSAL THAT WOULD BEST BENEFIT THE FAA.

1.2 REFERENCES

FAA-C-1217f	Electrical Work, Interior
FAA-STD-019e	Lightning Protection, Grounding, Bonding, and Shielding.
NEC	2008 National Electric Code
IBC	INTERNATIONAL BUILDING CODE 2006

1.3 DRAWINGS

PVU-B-RTR-A001	Building Layout (conceptual) including electrical one line diagram.

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This associated scope drawing is provided to show a general configuration and minimum requirements. The contractor is encouraged to submit on improvements and enhancements to the standard drawings.

1.4 DESIGN AND FABRICATION

Salient Features and minimum requirements:

Shelter shall be steel, factory assembled, self-contained and portable. All necessary material not otherwise indicated to be by the Government furnished, shall be provided by the shelter manufacturing contractor.

All electrical and grounding work shall be in compliance with the FAA Specification FAA-C-1217f, FAA Standard FAA-STD-019E and the National Electric Code.

1.5 DESIGN CRITERIA

1. Shelter building shall be designed and fabricated to prevent entry of rain, snow, wind blown
dust, rodents and moisture. Louvers shall be tight sealed when closed.

2. Design and Fabrication of one 22' x 20' (overall plan dimensions) exterior metal shelter to accommodate the nine electronic racks and associated mechanical and electrical equipment necessary for the facility operation.

3. Design of the Shelter foundation, based on foundation report R B& G Engineering.

4. Delivery of the building to the sites and off-loading the building at the sites.

Note: All fabrication, equipment installation, and initial testing shall be done indoors at the contractor's shop. The contractor shall allow open access to the FAA while fabrication and equipment installation is taking place.

The contractor is required to furnish all labor, materials (except Government furnished), services, equipment, insurance, bonds, security notifications, licenses, permits, and fees in accordance with applicable federal, state and local regulatory requirements to complete the specified work. Any miscellaneous labor, equipment and/or materials not specifically detailed or specified, but required to complete the project, shall be provided as an integral part of the work.

The salient features listed below are minimum requirements. The attached drawings are provided to give the contractor a conceptual idea of the FAA shelter requirements. The contractor is encouraged to provide a new and unique proposal that would best benefit the FAA.

1.6 SUBMITTALS

1.6.1 Building Design Drawings

Text documents shall be provided in hardcopy and in portable document MS Word (*.doc) or (*.pdf) format. Building design drawings shall be provided in hardcopy and electronically in MicroStation Version 8 format (*.dgn). Drawings must comply with FAA drawing standard FAA-STD-002f. The sheet size for all drawings must be ANSI-D (22" x 34"), and each drawing must incorporate the FAA title block that will be provided.

- Shop Drawings: Show application to project. Furnish setting drawings and templates for installation of bolts and anchors in other Work. Indicate shop and field welds by standard AWS welding symbols in accordance with AWS A2.4.

- Product Data: Catalog sheets, specifications, and installation instructions for each fabricated item specified, except submit data for fasteners only when directed.

1.6.2 MATERIAL

The contractor shall submit catalog data, cut-sheets, samples, and any other required information to the FAA Project Engineer for approval of the following:

1. Contractor furnished electrical components including enclosures, cables, connectors, and conduits.

2. HVAC components.

3. Contractor furnished hardware.

4. Labels.

5. Misc. furnishings including shelves, cabinets, desk, chairs, carts, etc.

6. Additional items deemed necessary by the Project Engineer.

1.7 DESIGN AND FABRICATION

Salient Features (minimum requirements)

Building shall be steel, factory assembled, self-contained, and portable. All necessary material not otherwise indicated to be Government furnished, shall be provided by the shelter manufacturer. Contractor furnished material shall be integrated with the Government furnished material and made totally operational.

All electrical work shall be in compliance with FAA Specification FAA-C-1217f, FAA Standard FAA-STD-019e, and the 2008 National Electric Code.

Structural:

1. Dimensions: 20' wide x 22' long (exterior dimensions) x 10'-10" outside height.

2. Loadings: 150 psf floor, 25 psf roof (live load), 125 mph sustained wind.

3. Exterior walls shall be 12-gauge paint quality steel. Interior walls shall accommodated a uniform vertical load of 400 lbs. per linear ft and be finished with 3/4" Fire Rated Plywood (A-D-INT-APA) painted. Ceiling shall be finished with 5/8" painted plywood, Veneer Grade B or better.

4. Insulation: -
   LTTR* R-Value 25.0 for Roof;
   LTTR* R-Value 18.5 for walls and floor.
   * Long Term Thermal Resistance values provide a 15 year time-weighted average in accordance with CAN/ULC-S770.

5. Roof: Waterproofed as approved by the FAA prior to application.

6. Floor beams shall be hot dipped galvanized, or as approved.

7. The building shall be designed and fabricated to prevent the entry of rain, snow, and other moisture.

8. Approximate total weight of finished building (with equip) = 25,000 lbs.

9. The roof slope shall be ½ " per foot.

10. Roof gutters and downspouts shall be attached to the roof to allow proper drainage

PART 2 PRODUCTS

Reference herein or in the drawings to any specific commercial product, process, or service, any trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the Federal Aviation Administration. The contractor may submit a request for substitution of a product, process, or service specifically called out. Such request shall be through the submittal process.

2.1. INVENTORY AND INSPECTION OF GFM

The contractor shall sign a copy of the Government furnished material (GFM) list acknowledging receipt of the furnished material, noting any discrepancies if necessary. When the contractor signs for custody, he acknowledges receipt in good condition and assumes responsibility for any

subsequent loss or damage. Material that is not installed in the building (such as the lamp heads) shall be delivered with the building.

2.2 GOVERNMENT FURNISHED MATERIAL

"GEOTECHNICAL ENGINEERING REPORT"
Proposed remote electronic equipment shelter, Provo Airport, Provo, Utah

Prepared by RB &G ENGINEERING, INC.

2.3 CONTRACTOR FURNISHED MATERIAL

The contractor shall furnish all material that is required and not otherwise indicated to be Government furnished. Materials furnished by the contractor shall be new, the standard products of manufacturers regularly engaged in the production of such materials, and of the manufacturer's latest designs that comply with the specification requirements.

2.4 MATERIALS

2.4.1 PAINT REQUIREMENTS

1. Exterior: Flat, color Bronze as approved. 3 mil epoxy primer and 15 mil electrometric liquid coating.

2. Interior Walls: White as approved. Interior primer and latex semi-gloss with light textured finish.

3. Interior side of external doors and interior door trim: ANSI 70 Gray, as approved.

4. Piping: Gray color for exterior vents, as approved. Epoxy metal primer with aliphatic urethane coating.

2.4.2 DOORS

1. The exterior double doors and door frames shall conform to Level III, extra heavy-duty, Style 3, in accordance with SDI Standards.

2. The exterior double doors shall be 1 ¾ inch thick, full flush, seamless.

3. The exterior double shall have minimum width of 72 inches and a height of 84 inches.

4. The Exterior doors shall have a 12" high kick plate, as approved. Doors shall have automatic door closures (with provisions for doors to be held open).

5. Provide a door canopy (with sealed drip edge) over each door, as approved.

2.4.3 FINISH HARDWARE

1. Butt Hinges: Hinges shall conform to ANSI A 156.1 and ANSI A156.7 (with non-removable pins). Grade 1, Full mortise, Extra Heavy Weight, 3 Knuckle, US26D Finish (not a stainless steel hinge). Provide four hinges per door.

2. Lockset: Heavy Duty Cylindrical Lock, 93K-7AB15-L-S3-626, manufactured by Best lock Corporation (no substitutes will be accepted). Provide four (4) construction core master keys and one (1) construction core control key. Final keying to be completed by Government at the site.

3. Flush bolts and strike: Conform to FF-H-111, Type 1045 and Type 1048 respectively.

2.4.4 STAIRS AND CANOPY AWNING

Stairs shall be 8' wide in front of the Equipment Room entrance. Canopies shall be at least as wide as the stairs. Individual stair treads shall be 12" deep and have a 7.25" rise. Total height of the stairs shall accommodate the building placed on a foundation that is at near grade.

2.4.5 ELECTRICAL PANELS AND DISCONNECT SWITCHES

The list of contractor furnished material includes, but is not limited to:

1. Main Disconnect, spare fuses, and Surge Arrester.

2. 200A Disconnect Switch and spare fuses.

3. Building Distribution Panel and Surge Arrester.

4. Terminal Box.

5. Power, control, and grounding cable.

6. Air terminals and down conductors.

7. Ground plates.

8. Electrical fittings, conduits, and components.

9. HVAC components and controls.

10. Labels for electrical components.

Note: - All disconnect switches shall be Square D, heavy duty or equal. Provide spare fuses for all disconnect switches.

2.4.6 TRANSIENT VOLTAGE AND SURGE SUPPRESSION

1. Provide and install Surge Protection for the Service Entrance Disconnect and the RTR Equipment Room distribution panel.

2. Facility surge protective device for the main service disconnect shall be LPC #20206-7.

3. Surge protective device for the facility equipment room distribution panel shall be LPC #2020-5U-G

2.4.7 MISCELLANEOUS FURNISHINGS

Provide and install miscellaneous furnishings, as approved. Items include (but are not limited to):

1. 12 ft wide shelving (braced to wall), 3 each

2. Heavy duty Safety Storage Cabinet for the Office Room

3. 72"w x 30"d Work Bench for Office Room:
   - 3 Drawer/1 Panel Leg, with Butcher Block Maple
   - Electronic Riser
   - Back & End Stops
   - Electronic Riser Wiring Kit
   - Chair for Work Desk, as approved.

4. Two each, drafting style chairs for the facility.

5. Exterior Lights, 3 each, 70W High Pressure Sodium

6. Interior Emergency Lights, 3 each

7. Fire extinguisher, 3 each

8. Heavy Duty Service Cart

9. Step stool

10. Emergency Eyewash Station

11. Angle Broom

12. Metal Dust Pan

13. 28 1/8 qt Polyethylene Wastebasket

14. Disposable Wipes

15. Bottle (32 oz) each of Commercial Grade window and surface cleaner.

16. 12/24 hour clock,

17. Spare floor tiles, at least 12 each, as approved.

18. Extra touch up paint (with mixing instructions if applicable) and 4 each small mixing containers, stir sticks, and 4 each touch up paint brushes (1"), as approved.

19. Provide and install a two-line phone.

20. Provide and install a 10 lb fire extinguisher in each room, as approved.

21. Provide non-conductive switchboard matting for the RTR Equipment room (30,000 volts/AC RMS dielectric strength) as approved.

22. Provide and install two hinged cover cable junction boxes NEMA 4X on the exterior of building.

23. Install "FAA Warning" signs on the outside the exterior door as approved. The "FAA Warning" sign will be government furnished.

24. Provide identification for all panel boards, safety switches, enclosures, and junction box's, etc., per FAA-C-1217f, and as approved. Name plates shall be black with white 3/8" high engraved letters.

25. Provide identification signs on the building doors as approved.

PART 3 EXECUTION

3.1 ELECTRICAL BONDING AND GROUNDING:

1. Run grounding electrode conductors from the Service Entrance Disconnect, and all electronic equipment cabinets to wall penetrations as approved. Leave at least 20' of slack at the walls (to be connected to the shelter counterpoise by the field contractor).

2. Provide and install a "MAIN" ground plate in the equipment building and a "SUPPLEMENTAL MAIN" ground plate on the opposite end of the Equipment room. The two main ground plates shall be interconnected by a #4/0 insulated conductor marked green with an orange tracer. Secure conductors to the wall using Unistrut one hole clamps (Unistrut P2010, or as approved) on sections of P4000 Unistrut as approved. Connections to the ground plates shall be made with stainless steel bolts, flat washers,

disc spring washers, and nuts (do not install washer between bonded members). For the Main and Supplemental Main ground plates, supply a 20ft long 500 kcmil cable with a two stud hole type compression lug, as approved.

3. Provide and install rooftop Halo Ring, air terminals, and four down conductors (per FAA-STD-019e). Leave at least 10 feet of down conductor slack at the ends (to be connected to the shelter EES by the field contractor).

4. Provide and install ground lugs (to accommodate #4/0) on shelter skids at all four corners.

3.2 LIGHTING

1. Interior fluorescent lighting shall be ceiling mounted and have wire guard diffusers and wraparound acrylic lenses, as approved. They shall be mounted a minimum of 9'-0'' AFF. The fluorescent lights shall be installed parallel to, but not over the cable trays.

2. Additional emergency lighting shall be provided (90 minute backup).

3. Provide one photo electric controlled 35W 120V exterior high-pressure sodium light (with an override switch labeled "Exterior Light Photocell - ON/OFF") shall be installed at the exterior door, and on the other building faces where there are no doors.

3.3 RECEPTACLES, SWITCHES AND JUNCTION BOXES

Provide and install all necessary outlets (electrical and telephone), receptacles, switches, junction boxes, terminal boxes, smoke detectors, and door alarms (intrusion switch's), as required. Use clamp backs to provide space between the conduits and the mounting surfaces (walls). Provide an exterior GFI outlet w/ weatherproof lockable enclosure (Hoffman #A-8R86HCR) on each side of the building as approved. The bottom of each GFI enclosure shall have a 2" sealable opening, as approved.

3.4 CABLE TRAY

Interior Cable Tray shall be mounted on a Trapeze support a minimum of 7'-6" above finished floor level. The tray shall be Aluminum tray, 12" wide with a 9" rung spacing and 3 inch high side rail. The trapeze supports shall be installed at a spacing of 10'- 0" on center wide enough for the tray and two 4" wire ways. One wire way will contain AC Circuits and the other shall contain DC circuits. The cable tray supports shall provide seismic support for the trays and wire ways to the walls of the building.

3.5 HEATING AND AIR CONDITIONING /HVAC

1. Provide and install two each self contained, single heat/air units with 3 ton air conditioning, Units shall have scroll compressors.

2. The thermostat for HVAC control shall be part of this ventilation control panel.

3. 5 kW heating and integrated thermostat.

3.6 INSTALLATION OF ELECTRICAL WIRING

The contractor shall complete the wiring for the equipment per the standard drawings and/or the equipment manufacturer's instruction manual. Installed equipment shall be made totally operational.

3.7 DELIVERY AND OFF LOADING OF BUILDING

The contractor shall be totally responsible for the delivery of the buildings to the site at the Provo Airport Utah. This includes the contractor's responsibility for meeting and complying with the Airport's security and access requirements.
The floor of the delivered building shall be covered and protected, as approved.
Any dirt or debris that gets accumulated on the building during delivery shall be cleaned off.
Once at the site, the contractor shall be responsible for off-loading the building and connecting it to the foundation. The building foundation will be constructed by others. All items furnished to the contractor associated with this equipment building, but not installed as part of the shelter (such as lamp heads), shall be shipped with the building to the Airport.
The FAA will provide an escort for the truck and crane delivering the shelter.

Show a separate cost breakdown for shipping.

PART 4 EXECUTION:

4.1 FABRICATION SCHEDULE

Work shall be completed within 120 calendar days of the start date.

4.2 AS-BUILT DRAWINGS

Provide As-built drawings electronic drafting format.

4.3 INSTALLATION AND WORKMANSHIP

All work shall be performed according to the intent of the contract, and normal and accepted industry and Government standards.

The contractor shall be regularly engaged in the fabrication of shelters with existing plant facilities equipped for year around shelter manufacturing.

The contractor shall be capable and experienced in transporting shelters to active airports and remote sites using specialized trucks, trailers and cranes.

All work shall be accomplished by skilled workers regularly engaged in this type of work. Where required by local regulations, the workers shall be properly licensed. Electrical terminations and splices shall be done by a qualified electrician.

The contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the FAA Project Engineer in every way possible. The contractor shall have a competent superintendent on the work site at all times who is fully capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Project Engineer.

4.4 TESTING OF ELECTRICAL POWER CIRCUITS

The contractor shall complete (at his own expense) all testing as required by these specifications. The results shall be submitted to the FAA Project Engineer. Required testing includes, but is not limited to, the following:

1. Ring out and continuity verification to insure proper termination.
2. Cables (see FAA-C-1217f, 5.3.2)
3. Load balancing (see FAA-C-1217f, 5.3.3)
4. Insulation resistance test (see FAA-C-1217f, 5.3.4)
5. Neutral isolation test (see FAA-C-1217f, 5.3.5)

4.5 CONTRACTOR'S ACCEPTANCE INSPECTION

Prior to shipping the building to the site, the contractor shall participate in a Contractor's Acceptance Inspection (CAI) with the FAA Project Engineer, or his representative. Items found to be deficient shall be corrected immediately or as directed.

PART 5 POINT OF CONTACTS:

Project Engineer:
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END OF SECTION